REMARKS

Claims 1-11, 16 and 17 are pending and rejected in this application. Claims 12-15 are canceled.

Responsive to the rejection of claims 1, 3, 5 and 6 under 35 U.S.C. § 103(a) as being obvious by U.S. Patent No. 6,306,258 (Lange et al.) in view of U.S Patent No. 5,830,316 (Ampulski), Applicants respectfully traverse this rejection and submit that claims 1, 3, 5 and 6 are now in condition for allowance.

Lange et al. '258 discloses air press 20 positioned about upper forming fabric 22 and lower forming fabric 24 and web 26 positioned therebetween (column 3, lines 50-52). Air press 20 includes pressure box 28 positioned above upper forming fabric 22 and vacuum box 30 positioned below lower forming fabric 24 (column 3, lines 52-55). Pressure box 28 includes rigidly mounted frame 32 and opensided box 34 mounted to frame 35 (column 4, lines 29-32). The loading of ceramic shoes 53, 54 and the movement of inner box 34 is controlled by pairs of opposed air tubes (column 4, lines 65-67). Upper air tubes 62, 64 move baffles 36, 38 downwardly by expanding between upwardly facing surfaces 66, 68 of short legs 55, 56 (column 4, line 67 through column 5, line 2). Lower air tubes 65, 67 move baffles 36, 38 upwardly away from forming fabrics 22, 24 by expanding between portions 74, 76 of short legs 55, 56 of baffles 36, 38 (column 5, lines 2-6). The upper air tubes 62, 64 and lower air tubes 65, 67 are connected to a source of compressed air (not shown) and a controller (not shown) with which baffles 36, 38 are pressed against upper forming fabric 22 (column 5, lines 7-11). In an alternative embodiment air press 120 employs vacuum roll 124 (column 6, lines 4-13).

Ampulski '316 discloses a method for making a wet pressed paper web (Fig. 4) including nip 300 between press roll 362 and shoe press assembly 700 (column 3, lines 50-57). The force

exerted by nip 300 is controlled by pressure source P, and can be calculated using various force or pressure transducers (column 14, lines 22-25).

In contrast, claim 1 recites in part: "a sensor mounted in the press apparatus for producing a signal indicative of the pressure on the paper web as the paper web is passed through the gap adjacent said sensor. . .". (Emphasis added.) Applicants submit that such an invention is neither taught, disclosed nor suggested by Lange et al. '258 and Ampulski '316, or any of the other cited references, alone or in combination, and has distinct advantages thereover.

Lange et al '258 teaches an air press and a controller. Ampulski '316 teaches a force exerted by a nip is controlled by a pressure source, and can be calculated using various force or pressure transducers. Lange et al '258 and Ampulski '316, separately or in combination, fail to disclose, teach or suggest a sensor mounted in the press apparatus for producing a signal indicative of the pressure on the paper web as the paper web is passed through the gap adjacent the sensor. The combination of Lange et al '258 and Ampulski '316 completely fail to disclose the structure of a sensor mounted in the press apparatus as recited by claim 1, but instead, merely indicates a force exerted by a nip can be calculated using various force or pressure transducers. Applicants respectfully submit that even if the prior art device performs all the functions recited in the present invention claims, the prior art cannot anticipate the claim if there is any structural difference (MPEP 2114), the structural difference being a sensor mounted in the press apparatus. Further, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case of obviousness in that, to establish a *prima facie* case of obviousness the prior art references must teach or suggest all the claim limitations (MPEP 2142), and the cited prior art fails to teach or suggest a sensor mounted in the press apparatus.

Applicants' invention has an advantage over the cited references in that the system thereby controls the cross-machine uniformity of the sealing or pressing nip of the press apparatus commensurate with optimal water removal and maintenance of the desired, uniform paper web caliper at a given speed. Another advantage of the present invention is to provide an air press which maximizes the pressing operation without compromising the speed of production.

For all of the foregoing reasons, Applicants submit that claim 1, and claims 3, 5 and 6 depending therefrom, are now in condition for allowance, which is hereby respectfully requested.

Responsive to the rejection of claims 2, 4 and 7-11 under 35 U.S.C. § 103(a) as being obvious by U.S. Patent No. 6,306,258 (Lange et al.) in view of U.S Patent No. 5,830,316 (Ampulski) and U.S Patent No. 6,387,218 (Graf), Applicants respectfully traverse this rejection and submit that claims 2, 4 and 7-11 are now in condition for allowance.

Graf '218 discloses an air press seal in a paper-making machine (Fig. 2) including a composite web having a plurality of separate layered webs, such as paper web P, belt B and felt F (column 2, lines 40-42).

However, claims 2, 4 and 7-11 depend from independent claim 1. As discussed previously, claim 1 is distinguished from the cited references, including Graf '218. Therefore any dependent claims, including claims 2, 4 and 7-11, are distinguished from the cited references.

For all of the foregoing reasons, Applicants submit that claims 2, 4 and 7-11 are now in condition for allowance, which is hereby respectfully requested.

Responsive to the rejection of claims 16 and 17 under 35 U.S.C. § 103(a) as being obvious by U.S. Patent No. 6,306,258 (Lange et al.) in view of U.S Patent No. 5,830,316 (Ampulski) and U.S Patent No. 6,387,218 (Graf), Applicants respectfully traverse this rejection and submit that

claims 16 and 17 are now in condition for allowance. Lange et al. '258, Ampulski '316 and Graf '218 have been discussed previously.

In contrast, claim 16 recites in part:

> the pressure body includes an air pressure chamber having leading and trailing arms . . . at least one sensor attached to at least one of the leading or trailing arms at the interface between the at least one arm and one of the felt and belt over the surface of the roll . . .

(Emphasis added.) Applicants submit that such an invention is neither taught, disclosed nor suggested by Lange et al. '258, Ampulski '316 and Graf '218, or any of the other cited references, alone or in combination, and has distinct advantages thereover.

Lange et al '258 teaches an air press and a controller. Ampulski '316 teaches a force exerted by a nip is controlled by a pressure source, and can be calculated using various force or pressure transducers. Graf '218 teaches an air press seal in a paper-making machine including a composite web having a plurality of separate layered webs, such as a paper web, a belt and a felt. Lange et al '258, Ampulski '316 and Graf '218, separately or in combination, fail to disclose, teach or suggest at least one sensor attached to at least one of the leading or trailing arms of a pressure body. The combination of Lange et al '258, Ampulski '316 and Graf '218 completely fail to disclose the structure of at least one sensor attached to at least one of the leading or trailing arms as recited by claim 16, but instead, merely indicates a force exerted by a nip can be calculated using various force or pressure transducers. Applicants respectfully submit that even if the prior art device performs all the functions recited in the present invention claims, the prior art cannot anticipate the claim if there is any structural difference (MPEP 2114), the structural difference being a sensor mounted in one of the leading or trailing arms of a pressure body. Further, Applicants respectfully submit that the Examiner has failed to make a *prima facie* case of obviousness in that, to establish a *prima facie* case of obviousness the prior art references must

teach or suggest all the claim limitations (MPEP 2142), and the cited prior art fails to teach or suggest a sensor mounted in one of the leading or trailing arms of a pressure body.

Applicants' invention has an advantage over the cited references in that the system thereby controls the cross-machine uniformity of the sealing or pressing nip of the press apparatus commensurate with optimal water removal and maintenance of the desired, uniform paper web caliper at a given speed. Another advantage of the present invention is to provide an air press which maximizes the pressing operation without compromising the speed of production.

For all of the foregoing reasons, Applicants submit that claim 16, and claim 17 depending therefrom, are now in condition for allowance, which is hereby respectfully requested.

For the foregoing reasons, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,

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October 29, 2003
Date